

What Environmental Benefits will the I-405 Improvements Provide?



Engineered Flow Control

Example: stormwater detention pond

Building new lanes on I-405 will create additional surface water runoff that must be captured and cleaned. In the past, stormwater detention ponds such as the one pictured on the left have been used. Stormwater detention ponds capture and store water runoff before it reaches a stream system. While methods like this manage water quality and quantity, they are expensive to build, focus on minimizing negative impacts, and provide only the minimal required benefits.

A better potential solution is to create a wetlands restoration site, pictured to the right. Capturing surface water upstream from the highway and detaining it in a more natural environment focuses on maximizing positive impacts to the watershed and can achieve additional environmental benefits at the same or less cost. WSDOT is employing this new approach on a variety of highway projects throughout the State.



Restoring Natural Flow Control

Example: wetlands restoration

New watershed characterization methods integrate the mitigation of wetland, riparian, floodplain, and stormwater impacts by restoring the landscape's capacity to provide necessary functions, while increasing the environmental benefits.

WSDOT is committed to watershed-based planning – here are some of the benefits

- Targets environmental improvement investments to those areas that will have the greatest long-term environmental benefit (vs. providing short-term spot treatments)
- Addresses how the watershed is functioning as a whole, rather than looking solely at the impact site and making minor improvements
- Provides opportunities to restore natural processes, making the watershed more biologically productive and reducing long-term maintenance costs around streams and wetlands
- Is more cost effective – the I-405 project team is conducting cost-benefit analyses on conventional vs. alternative mitigation options
- Costs less in challenging topography, such as steep slopes, high groundwater or wetlands

WSDOT is currently working on project-level environmental assessments to ensure that the project will avoid or compensate for environmental impacts. If you'd like to learn more, or be part of this process, please consider attending a scoping meeting in your area (www.wsdot.wa.gov/I-405).

